

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,775	12/06/2001	Everett F. Simons	PARI/0015/US	2736
75	90 07/02/2003			
MIRICK O'CONNELL			EXAMINER	
1700 WEST PARK DRIVE WESTBOROUGH, MA 01581-3941			ORTIZ, ANGELA Y	
			ART UNIT	PAPER NUMBER
			1732	
			DATE MAILED: 07/02/2003	7

Please find below and/or attached an Office communication concerning this application or proceeding.

3	Applicati n N .	Applicant(s)
)	10/010,775	SIMONS; EVERETT F.
Office Action Summary	Examiner	Art Unit
	Angela Ortiz	1732
The MAILING DATE of this communicati n app Period f r Reply	pears n the cover she t with th	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro cause the application to become ABANDON	timely filed ays will be considered timely. m the mailing date of this communication. IED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 05 M	<u>May 2003</u> .	
2a) ☐ This action is FINAL . 2b) ☑ Th	is action is non-final.	
Since this application is in condition for allowards closed in accordance with the practice under Disposition of Claims		
4) Claim(s) $\underline{1-15}$ is/are pending in the application		
4a) Of the above claim(s) <u>1-7,11,12,14 and 15</u>	is/are withdrawn from considera	ation.
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>8-10 and 13</u> is/are rejected.		
7) Claim(s) is/are objected to.	•	
8) Claim(s) are subject to restriction and/or Application Papers	r election requirement.	
9) The specification is objected to by the Examine	r.	
10) The drawing(s) filed on is/are: a) □ accept	oted or b) objected to by the Ex	aminer.
Applicant may not request that any objection to the	e drawing(s) be held in abeyance.	See 37 CFR 1.85(a).
11)☐ The proposed drawing correction filed on	_ is: a)□ approved b)□ disapp	roved by the Examiner.
If approved, corrected drawings are required in reg	oly to this Office action.	
12) The oath or declaration is objected to by the Ex	aminer.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119	(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents	s have been received.	
2. Certified copies of the priority documents	s have been received in Applica	tion No
Copies of the certified copies of the prior application from the International But See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	-
14) ☐ Acknowledgment is made of a claim for domestic	•	
a) The translation of the foreign language pro		
15) Acknowledgment is made of a claim for domesti		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	rry (PTO-413) Paper No(s) I Patent Application (PTO-152)

Application/Control Number: 10/010,775

Art Unit: 1732

DETAILED ACTION

Election/Restrictions

Applicant's election of claims 8-10, 13 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-7,11-12,14-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Jin et al., USP 5,045,249.

The cited reference teaches the claimed method of making an elastomeric device for electrically interconnecting components including creating an array of metallic columns on a carrier and encapsulating the array in a dielectric medium. The metallic

Application/Control Number: 10/010,775

Art Unit: 1732

component used is a low melting point metal and the dielectric medium may be nonconductive elastomeric materials. See col. 1, lines 45-60; col. 2, lines 50-68.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin et al., USP 5,045,249.

The cited reference substantially teaches the basic claimed process of forming a composite medium useful in electrical interconnection applications, wherein a plurality of magnetic particles are provided and aligned within a nonconductive medium. The detailed process steps include providing magnetic particles, which may be coated with a metal alloy, within a nonconductive elastomer material. A magnetic field is applied to the mixture to align the particles therein in the form of columns. The material mixture is

Art Unit: 1732

heated and cured to fix the conductive pathways therein. See col. 2, line 7 to col. 3, line 25.

The cited reference does not set forth the specific, positively set forth step of heating to fuse the low melting point alloy as claimed. However, note that the figures depicted do show the particles attached integrally, which is readable on the claimed step of fusing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to fuse the coating as claimed, to form the desired columns as set forth and depicted in the applied reference.

With respect to claims 9-10, note that the components set forth in the applied reference are supplied with contact pads and metal coating to form electrical pathways through the medium. See col. 1, lines 45-55; col. 2, lines 1-15; col. 3, lines 8-10.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP's 4209481; 4587066; 4737112; 5132058; 6149857; 6190509.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela Ortiz whose telephone number is 703-308-4446. The examiner can normally be reached on Monday-Thursday 9:00-6:30.

Application/Control Number: 10/010,775 Page 5

Art Unit: 1732

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Angela Ortiz Primary Examiner Art Unit 1732

ao June 29, 2003